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Rabbit Anti-PBX2 antibody

SL12297R

Product Name:	PBX2
Chinese Name:	Blymphocyte白血病前体蛋白转录因子2抗体
Alias:	G17; Homeobox protein PBX2; HOX12; PBX2MHC; pre-B-cell leukemia homeobox 2; pre-B-cell leukemia transcription factor 2; Protein G17; PBX2_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Zebrafish,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	46kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from Human PBX2:265-370/430
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Pbx 1, 2, 3 and 4 are members of the TALE (three amino acid loop extension) family of homeodomain-containing proteins. Human pre-B cell acute leukemias are frequently associated with a t(1;19)(q23;p13.3) chromosomal rearrangement, which creates a chimeric gene encoding a fusion between the E2A and Pbx 1 gene products. Pbx 2 and Pbx 3 share 92% and 94% respective identities with Pbx 1 over a 266 amino acid region flanking their homeobox domains, while all three proteins are quite divergent at their

amino- and carboxy-termini. Two forms of Pbx 1 and Pbx 3 each differ primarily in their carboxy-termini and result from alternative mRNA splicing. Unlike other homeotic selector genes which are expressed transiently during development and differentiation, Pbx gene transcripts are ubiquitously expressed in both fetal and adult tissues and cell lines. Additionally, Pbx 2 and Pbx 3 transcripts are detected in lymphoid cells, which do not express Pbx 1. Pbx 4 expression is confined to the testis, especially to spermatocytes in the pachytene stage of the first meiotic prophase.

Function:
PBX2 is a ubiquitously expressed member of the TALE/PBX homeobox family and was identified by its similarity to a homeobox gene involved in t(1;19) translocation in acute pre-B-cell leukemias. PBX2 is a transcriptional activator which binds to the TLX1 promoter, binding to the sequence 5'-ATCAATCAA-3'. It forms heterodimers with MEIS1, involved in activation of PF4 transcription, and heterotrimers with MEIS1 and HOXA9. The gene is located within the major histocompatibility complex (MHC) on chromosome 6.

Subcellular Location:
Nuclear.

Tissue Specificity:
Ubiquitously expressed.

Post-translational modifications:
Phosphorylated upon DNA damage, probably by ATM or ATR.

Similarity:
Belongs to the TALE/PBX homeobox family.
Contains 1 homeobox DNA-binding domain.

SWISS:
P40425

Gene ID:
5089

Database links:
UniProtKB/Swiss-Prot: P40425.2

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.